Breast Self-Examination

DESPITE ADVANCES in technology, survival rates for carcinoma of the breast remain almost the same, stage for stage, as they were 35 years ago. The improvement which has been noted in overall survival figures is due primarily to earlier detection of the disease.

At present, mammography is the most effective technique for the early diagnosis of carcinoma of the breast, and the only reliable method for identification of a tumor before a mass is palpable. However, at present, a lack of equipment and trained personnel preclude use of mammography to screen the entire population at risk. Furthermore, the potential oncogenic hazard of repeated breast irradiation may limit the application of this technique in the future.

Since more than 90 percent of breast masses are first noted by women themselves, breast self-examination may be the most practical method for quickly reducing the high mortality rate of breast cancer. However, findings in a recent study carried out by Gallup for the American Cancer Society showed that only 18 percent of adult American women regularly examine their own breasts. The major reasons advanced for this failure to do such examination were fear of cancer, lack of knowledge about the technique and lack of confidence in the ability to recognize an abnormal lump.

The study results also showed the value of a doctor's office as a teaching site for this technique. More than 90 percent of the women taught by the physician or his staff continued self-examination. Of those women taught in other settings, only 14 percent did the examination regularly afterward. Apparently, when this instruction takes place in the doctor's office, women are more highly motivated to learn and apply the information.

Several new approaches to patient instruction have proven to be of great value in the practice setting. Nurses and other members of the office staff have been trained to teach breast self-examination very effectively. Audiovisual materials have been created to reduce the amount of one-to-one teaching time. Simulation models of the breasts have been developed; these are very helpful in building the confidence of women in their ability to find a lump.

Because of the proven effectiveness of teaching in a doctor's office, each physician must find a way to include instruction about breast self-examination in the routine care offered to women patients. At present, this may be the most practical way to quickly lower the mortality rate of carcinoma of the breast.

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Breast Thermography

BREAST THERMOGRAPHY is the pictorial display of the infrared emission of the breast using a heat sensing device. It is an extension of clinical thermometry. It does not diagnose carcinoma but merely records abnormal temperature patterns and differences. Many benign conditions of the breast as well as carcinoma produce abnormal findings on a thermogram. Thermograms are currently being used in conjunction with physical examination and mammography.

When correlated with the presence of carcinoma, investigators have reported a true positive rate from 50 to more than 90 percent. Findings on a thermogram are positive or suspicious in most series in about three fourths of cases of carcinoma of the breast. Both very large and very small malignant tumors may not be detected by the thermogram. Since thermography is sensitive to a wide variety of benign breast disease and cannot distinguish metabolically active benign disease from malignant disease, a false positive rate as high as forty percent will occur if symptomatic women are screened.

The role of thermography is currently being evaluated by the Breast Cancer Detection Demonstration Project (which is sponsored by the American Cancer Society and the National Cancer Institute). It is hoped that it might provide a method of screening patients for mammography, but this is under investigation now and the examination may not be a valid method of patient screening.

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